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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,293	09/30/2005	Dagmar Feldmann	FELDMANN ET AL 1 PCT	2065
25889	7590	01/11/2008	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			SHAH, SAMIR M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,293	Applicant(s) FELDMANN ET AL.	
	Examiner Samir M. Shah	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/30/2005; 11/01/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities:

(a) At numerous places throughout the written specification, the word, "behavior" is misspelled as "behaviour". Please delete each occurrence of the word "behaviour" and replace it with --behavior--.

(b) As to page 3, line 4, delete "standardisation" and replace it with --standardization--.

3. Appropriate correction is required.

Claim Objections

4. Claims 1-8 are objected to because of the following informalities:

(a) As to claims 1, line 1, delete "Imbalance" and replace it with --An imbalance--.

(b) As to claim 1, line 1, delete "for rotors" and replace it with --for a rotatable rotor--.

(c) As to claim 1, line 2, delete "device for static fluid bearing" and replace it with --device as a static fluid bearing--.

(d) As to claim 1, line 3, delete "for a rotatable rotor" and replace it with --for the rotor--.

(e) As to claim 1, lines 4, 13, 15, 16; claim 5, line 3; claim 7, lines 8, 10, delete "behaviour" and replace it with --behavior--.

(f) Claim 1 recites the limitation "the signals" in line 7. There is insufficient antecedent basis for this limitation in the claim.

(g) As to claim 1, line 11, the phrase "one bearing plate (12, 12')" is unclear and indefinite because it is not clear whether the recited limitation includes a single bearing plate 12 or 12', or includes two bearing plates 12 and 12'.

(h) As to claim 1, line 12, delete "assigned to a rotor end surface" and replace it with --assigned to an end surface of the rotor (1)--.

(i) As to claim 1, line 13, delete "fluid, in that a device" and replace it with --fluid, further characterized in that a device--.

(j) As to claim 1, line 14, delete "is provided, and in that" and replace it with --is provided, and further characterized in that--.

(k) As to claim 1, line 16, delete "measuring process, which takes" and replace it with --measuring process that takes--.

(l) As to claims 2-6, line 1, delete "Imbalance" and replace it with --The imbalance--.

(m) As to claim 2, lines 5-7, delete "joining of, in particular, bearing shells (11, 11') which are to be exchanged, and have different fluid channels (21, 21'), to the bearing device" and replace it with --joining of the bearing shells (11, 11'), which are to be exchanged, and have different fluid channels (21, 21'), to the bearing device--.

(n) As to claim 3, line 3, delete "bearing plate (12, 12') is" and replace it with --bearing plates (12, 12') are--.

(o) As to claim 3, line 7, delete "joining of, in particular, bearing" and replace it with --joining of the bearing--.

(p) As to claim 4, lines 3-4, delete "rigidly supporteand binding d, fluid-supplied bearing plates" and replace it with --rigidly supported and binding, fluid-supplied bearing plates--.

(q) Claim 4 recites the limitation "the two rotor end surfaces" in line 4. There is insufficient antecedent basis for this limitation in the claim.

(r) As to claim 5, line 5, delete "essentially" and replace it with --substantially--.

(s) As to claim 6, line 6, the "V-shaped area" cannot use the same reference number "(5)" as the "belt drive" since this would render the claim unclear and indefinite.

(t) As to claim 6, line 3, delete "with changeable" and replace it with --with a changeable--.

(u) As to claims 7 and 8, line 1, delete "Method" and replace it with --A method--.

(v) As to claims 7 and 8, line 2, delete "imbalance of rotors (1)" and replace it with --imbalance of a rotor (1)--.

(w) As to claim 7, lines 8, 9; claim 8, lines 8, delete "the measuring process" and replace it with --the measuring method--.

(x) Claims 1 and 7 recite the limitation "the rotary behaviour" in lines 3-4 (claim 1) and line 8 (claim 7). There is insufficient antecedent basis for this limitation in the claim.

(y) Claim 8 recites the limitation "the rotational speed" in line 8. There is insufficient antecedent basis for this limitation in the claim.

5. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) As to claim 1, line 2, the phrase "essentially one" renders the claim indefinite. It is not clear whether essentially one only includes one or includes at least one or includes more than one.

(b) Also as to independent claim 1, last line, the phrase "constant or preferably variable over time" renders the claim indefinite. In particular, the term "preferably" renders the claim unclear as to whether both "constant" and "variable" are recited in the alternative or as a combination or as one term being preferred over the other.

(c) Claims 2-6 dependent on claim 1 are rejected for the same reasons as mentioned above.

(d) Additionally, as to claim 2, line 5, the phrase "in particular" renders the claim indefinite because it is not clear whether only bearing shells (11, 11') "which are to be exchanged" are joined or bearing shells (11, 11') which are not to be exchanged are also to be joined.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trionfetti (US Patent 6,657,341 B2 henceforth "Trionfetti") in view of Okumura (US Patent 5,255,566 henceforth "Okumura").

(a) As to claims 1, 4 and 5, Trionfetti discloses an imbalance measuring device (2) for a rotatable rotor (5) (figures 1-3; column 3, lines 13-29), with one bearing device for static fluid bearing for the rotor (5) (figures 1-3), a device/belt drive (6) (the belt of which can be put on at two substantially opposite rotor positions) to change a rotary behavior of the rotor (5) (figures 1-3; column 3, lines 30-41), at least one measuring transducer which captures the effects of the imbalance of the rotor (5) in a measuring process (figures 1-3; column 3, lines 24-26), a device to generate a reference signal (figures 1-3), and an evaluation device for signals which the measuring transducer supplies using

the reference signal (figures 1-3), characterized in that the bearing device has two rigidly supported and binding, fluid-supplied bearing plates (3) which enclose the two rotor (1) end surfaces between them (figures 1-3; column 3, lines 18-29, 55-57; column 4, lines 52-54), further characterized in that a device (1) to capture the rotary behavior of the rotor (5) is provided (figures 1-3), and further characterized in that the device (6) to change the rotary behavior is decoupled from the rotor (5) during the measuring process, which takes place with rotary behavior which is constant or preferably variable over time (abstract; figures 1-3; columns 3, 4).

As to claim 1, Trionfetti does not expressly disclose "at least two open, fluid-supplied bearing shells...to receive sections of the rotor periphery".

Okumura discloses a "bearing construction and vibration detecting apparatus" including rotatable rotor (1) "to be examined for an unbalance error", a "bearing assembly 3 supporting the rotary shaft 2 and serving as a rotary shaft support mechanism" including at least two open, fluid-supplied bearing shells to receive sections of the rotor (1) periphery (figures 1, 2; column 2, line 61 - column 3, line 66).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Trionfetti's imbalance measuring device to include Okumura's open, fluid-supplied bearing shells that would receive sections of the rotor (5) because this would provide additional support for the rotor and thus improve the overall accuracy of the imbalance measuring apparatus taught by Trionfetti.

(b) As to claim 6, Trionfetti discloses the belt drive (6) having a V-shaped area with a changeable included angle, within which the rotor (5) is arranged (figures 1-3; column 3, lines 30-41).

(c) As to claims 7 and 8, Trionfetti discloses a method of measuring the imbalance of a rotor (5), wherein the rotor (5) is supported in a static fluid bearing of an imbalance measuring device (2) and a rotary movement of the rotor (5) takes place (figures 1-3; column 3, lines 30-41), wherein the rotor (5) is supported in a precise position in at least two aerostatic bearings in the radial direction and in at least one aerostatic bearing in the axial direction (figures 1-3; column 3, lines 18-29, 55-57; column 4, lines 52-54), and during the measuring method the rotary behavior of the rotor (5) is not influenced and the measuring method takes place with time-variable or constant rotary behavior (abstract; figures 1-3; columns 3, 4).

Allowable Subject Matter

11. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon, cited in the attached 892 form, is considered pertinent to applicant's disclosure.

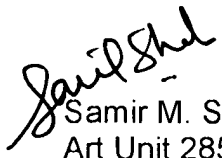
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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir M. Shah whose telephone number is (571) 272-2671. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Samir M. Shah
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01/04/2008


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